

gradually increased to 10 mg. After the maximum dose was obtained this was continued from three to eight days and then gradually diminished to the minimal dose. The arsenic was then discontinued for fourteen days and after that period resumed as before. He gives the details of 12 cases of multiple sclerosis treated by this method. Nine of these attained a considerable improvement. The improvement at first was mostly general, the patients gaining weight and strength. Following this general improvement there was a marked functional improvement especially as regards their ability to walk. The best results were observed in complicated multiple sclerosis without optic atrophy. No benefit was observed when the optic nerve was already involved. In 5 cases of polyneuritis and 12 cases of neuritis and paralysis of various origins this treatment seemed to effect a marked improvement. No benefit was obtained in one case each of spastic spinal paralysis, paralysis agitans, Friedreich's ataxia, pseudobulbar paralysis, lead poisoning, and hemiplegia. Six out of 10 cases of tabes showed a marked improvement in their general condition, and in 4 of these cases the lightning pains, girdle sensations, and gastric crises disappeared. None of these 10 cases, however, improved as regards their objective symptoms. Willige says that his results with arsenic lead him to believe that the long continued use of small doses of arsenic has a stimulating action upon nerve tissue.

The Effect of Coffee and Tea upon the Production of Uric Acid.—SCHITTENHELM (*Therap. Monatshefte*, 1910, xxi, 113) believes that both coffee and tea increase the uric acid in the blood, and should be excluded from the dietary of gouty individuals, especially during an acute attack. He bases this belief upon experiments on dogs, the details of which he gives in his article.

The Dietetic Treatment of Cholelithiasis.—KOLISCH (*Med. Klinik.*, 1910, vi, 531) believes that dietetic measures are very important in the treatment of cholelithiasis. The diet, according to Kolisch, should be so regulated that the liver is spared as much work as possible. Furthermore, it is important to keep the intestines active and free from catarrhal processes. He believes that intestinal catarrh may cause a similar inflammation in the gall-bladder. He ascribes the benefit derived from the Carlsbad cure to the effect upon the intestines of the Carlsbad waters. Kolisch forbids all highly seasoned foods, very acid foods, raw vegetables and fruits, fat and salted meat, any fat that does not melt readily, and any food that is prepared with yeast or other ferments. The fats that are allowed are oil, cream, and butter. The amount of protein should be limited and given in small portions throughout the day. Care must be taken to avoid protein containing a large amount of extractive or purin bodies. Cold drinks are forbidden, but hot drinks have as favorable an action as hot external applications. Kolisch applies hot fomentations to the abdomen for two hours after dinner every day for two or three months after an acute attack. He also forbids any active exercise for a year following the acute attack, during which time also the dietetic measures are to be kept up.

Autoserotherapy of Tuberculous Peritonitis.—EBLER (*Med. Klinik* 1910, vi, 627) reports a case of tuberculous peritonitis treated on the principles of autodrainage recently advocated for the treatment of hydrocephalus. He made a permanent fistula leading from the peritoneal cavity to the subcutaneous tissue through the separated recti muscles. The skin incision was closed tightly. The ascites was thus drained and the reabsorption of the fluid induced by an autoserotherapy. The patient improved rapidly, gaining 25 pounds in weight, and there was no return of the ascitis.

The Relation of Digitalis to the Bundle of His.—HARE (*Therapeutic Gazette*, 1910, xxvi, 244) points out that in valvular disease, especially mitral stenosis, a state closely allied or equivalent to partial heart block with jugular pulsation, frequently occurs. In other cases a state is produced like that of nodal rhythm. The clinical recognition of these conditions is most important because of the possibility of still further delay in the passage of the contractile impulse from the sino-auricular node over His's bundle by the action of digitalis. Hare, therefore, says that digitalis may be a very dangerous drug in mitral stenosis, since by its powers of diminishing auricular contraction through vagal stimulation, and by its inability to increase the power of the auricular wall, it may increase the danger of auricular distention by retained blood, and so paralyze this part of the heart. Furthermore, this tendency to distention of the left auricle is aggravated by the fact that digitalis stimulates the right ventricle to drive more blood into the left auricle, thereby still further distending that cavity. Hare cites the views of many well known observers of the mechanics of the circulation from which he draws the following deductions as to the use of digitalis in mitral stenosis: Given a patient suffering from circulatory failure due to mitral stenosis, it is our duty not only carefully to weigh the import of the tumultuous cardiac sounds, but by the use of instruments of precision to determine, if possible, whether there is delay in the transmission of the contraction impulse over His's bundle. If such a delay exists, digitalis in doses large enough to cause a distinct and sharp cardiac effect is probably capable of prolonging this delay and so doing harm. If, in addition to this delay there is a jugular pulse synchronous with ventricular systole, digitalis is still more contraindicated, as it will impair the action of the left auricle, and will still further distend it by stimulating the right ventricle. If given at all, the dose of digitalis must be so small as to produce a very gradual effect, one which will not consist in decreasing auricular contraction through vagal stimulation, but gently reestablish general cardiac power. In other words, here is another instance in which the question of a proper dose is as important as the choice of the proper drug. The question naturally arises: If not digitalis, what else? The answer would seem to be that in such a case as that just described, we should give the patient absolute rest, unload the portal system by free purgation, use venesection to relieve stasis, and give rapidly-acting diffusible stimulants for a few hours until the coördination of cardiac movement is reestablished. When this is done, then small doses of digitalis, arsenic, and iron may be used to restore cardiac tone.